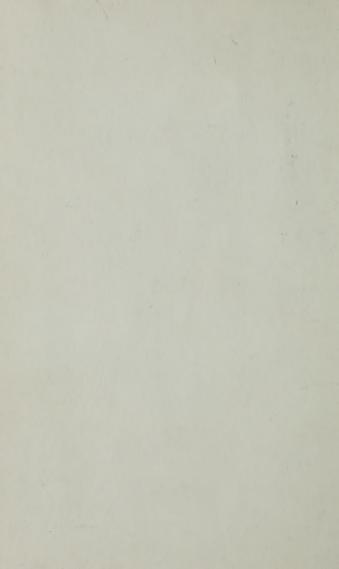


Digitized by the Internet Archive in 2022 with funding from Boston Public Library



# BANNEKER,

THE

## AFRIC-AMERICAN ASTRONOMER.

FROM THE POSTHUMOUS PAPERS

OF

MARTHA E. TYSON.

Adited by her Banghter,

"Act well your part, there all the honor lies."

PHILADELPHIA:
FRIENDS' BOOK ASSOCIATION,
No. 1020 Arch Street.
1884.

4249

B. H., 353, 189 Oct. 3, 1884.

COPYRIGHT.

BY ANNE T. KIRK. 1884.

All rights reserved.



### INTRODUCTION.

THE accompanying sketch of the life of Benjamin Banneker, the Afric-American Astronomer, was partially arranged for publication by Martha E. Tyson.

In the year 1854, she had furnished a small paper on this subject to the Maryland Historical Society, which was published (by that body) for private distribution. Subsequently, she was able, through much research, and by conversing with all such aged people as had known Banneker, to collect some further items of interest concerning him.

Being a daughter of the warmest friend of this extraordinary man, she often expressed her regret that the busy life of her father had hindered him from writing the memoir of Banneker, which he had projected, and for which he was in every way so fitted.

Feeling a great desire that the memory of the astronomer should be kept green, she designed

1 \*

placing the accompanying facts in the hands of

the public.

Not having lived to fulfil her intention, the duty of completing the work has devolved upon one who, inheriting her mother's esteem for so rare a genius, has earnestly endeavored to carry out her wishes in the arrangement.

A. T. K.

November, 1878.

### CONTENTS.

1								P	AGE
FAC-SIMILE OF SIGNATURE .						Fr	ont	isp	iece
Introduction									5
ANCESTRY									9
Difficult Circumstances through which Ban-									
neker's Genius Struggled		•							16
HIS DELIGHT IN MECHANICS-	_M	AK	ES	Н	IM	SEI	F	A	
CLOCK	٠			٠	۰	٠	٠	۰	22
ELLICOTT FAMILY				·		•			23
ASTRONOMICAL STUDIES—LETTER TO GEORGE ELLI-									
COTT									28
Assisted in Survey of the F	EDE	RA	r J	CEF	RI	TOF	RY		36
CALCULATES AN ALMANAC .									38
LETTER TO THOMAS JEFFERSON	۲.					,			39
Thomas Jefferson's Reply.									45
BANNEKER'S FIRST ALMANAC	Pur	BLIS	SHE	ED					46
MATHEMATICAL PROBLEMS .						,			53
SCIENTIFIC AND NATURAL HIS	TOR	y l	Tol	ES,	, E	rc.			60
OLD AGE AND DEATH									66
							3711		



# BANNEKER,

THE AFRIC-AMERICAN ASTRONOMER.

### CHAPTER I.

THE ancestry of Benjamin Banneker, the Afric-American astronomer, can only be traced as far as his grandparents. The first that is known of the name of Banneker is that it was borne by an African prince. He was the son of the king of his country, who, being captured and brought to America as a slave, was purchased by Molly Welsh, an English woman owning a small farm near the Patapsco River, about twelve miles from its mouth.

This Molly Welsh, who was a person of exceedingly fair complexion and moderate mental powers, had been an involuntary emigrant to America.

When a servant on a cattle-farm in her native

land, where milking formed a part of her duty, she was accused of stealing a bucket of milk, which a cow had kicked over. For this supposed offence, she was, by the stern laws of her country, sentenced to transportation, escaping a heavier penalty from the fact that she could read. On her arrival here she was, as was the custom, sold, to defray the expenses of the voyage, for a term of seven years, and purchased by a tobacco planter on Patapsco River.

When her term of service had expired, land being of merely nominal value at that period, she was able to purchase the farm mentioned above. Here, needing assistance in her work, she bought in 1692 two negro men, one being the "Banneker" of whom we have spoken. The other slave proved an industrious and valuable servant, while Banneker seemed to show his royal blood by a decided disinclination for work.

After a few years their owner set them free. The diligent worker had meanwhile embraced the Christian religion; but the prince remained loyal to the faith of his ancestors, and retained his African name, being called simply "Banneker." He was a man of bright intelligence and fine temper, with a very agreeable presence,

dignified manners, and contemplative habits. He had found such favor in the eyes of his mistress that, on releasing him from slavery, she married him.

Banneker died early, leaving his wife with four young children. The family tradition tells us nothing further of her until she had a daughter grown to womanhood. Mary, her oldest daughter, married early a native African. He had been purchased from a slave-ship by a planter living near her mother. His devotional turn of mind induced him early to become a member of the Church of England, and he received the name of Robert in baptism, upon which event his master gave him his freedom.

It was subsequent to his being a free man that he married Mary Banneker and assumed his wife's surname.

Robert and Mary Banneker had four children, Benjamin, the Afric-American astronomer, being the eldest, and the only son. The name of the eldest daughter has not been preserved. She married —— Henden, whose son, John Henden, was well known to the writer. The other daughters were, Minta, who married —— Black, and Mary, who married —— Morton. The date of the arrival of Robert Banneker in this

country has not been preserved, nor was that of his marriage recorded. We learn, however that seven years subsequent to the latter even he purchased a farm. This property was conveyed to him by deed, from Richard Gist, on the 10th of March, 1737. We thus learn indirectly that the parents of Benjamin Banneker were married about the year 1730. For this land Robert Banneker (recorded as Banneky) paid 17,000 pounds of tobacco, that article being used instead of money in the colony.

Immediately upon being possessed of this farm, which contained 100 acres, and was near that of his mother-in-law, Robert Banneker set about building a house, improving his land, and making a comfortable home for his family. Benjamin Banneker was six years old when his father made the above purchase. The date of his birth is recorded in his own handwriting in a quarto Bible, now in possession of one of his relatives. This earliest specimen of his handwriting begins with a note of the purchase of the Bible, thus:

<sup>&</sup>quot;I bought this book of Honora Buchanan the 4th day of January, 1763. B. B."

<sup>&</sup>quot;Benjamin Banneker was born November the 9th, in the year of the Lord God, 1731."

It is unfortunate that he did not complete his family record, but only added the death of his father.

"Robert Banneker departed this life July the 10th, 1759."

Few of the circumstances of the early life of the subject of our narrative are now known. According to the testimony of John Henden (a son of Banneker's oldest sister), his bright mind made him a great favorite with his grandmother, who found much pleasure in imparting to him all her small stock of knowledge in the department of letters. She much desired he should grow up a religious man, in furtherance of which view it was her delight to have him read to her from a large Bible which she had imported from England. After he had learned to read he attended a small school, where a few white and two or three colored children received together instruction from the same master.

It was in this school that his love of study first became apparent. Jacob Hall,\* who was a

<sup>\*</sup> Jacob Hall was a laborer, who won the esteem of his employers by his intelligence, industry, and integrity. For over thirty years he had charge of the graveyard of the Society of Friends at Ellicott's Mills. His father had been a faithful servant of Walter Hall, a wealthy planter of Anne Arundel County, who, upon giving him his liberty, added thirteen

fellow-pupil with Banneker, and was intimately acquainted with him during his whole life, said that, as a boy, he was never fond of play or any light amusement; that "all his delight was to dive into his books."

Benjamin Banneker's opportunities for study under a teacher were very limited, and of short duration. The school was only open during the winter season, and he ceased to attend it after he had grown large enough to assist his father in his labors of the farm; but, happily, his love of reading and desire to acquire knowledge remained with him.

After his youth was passed, he still continued to reside with his parents, and at the time of his father's death, which, we have seen, took place in 1759, he was twenty-eight years old.

Robert Banneker left to his widow and to his son, as joint heirs, the dwelling in which they lived and seventy-two acres of land. The remaining twenty-eight acres he divided between his three daughters.

Despite the studious habits of Benjamin Banneker, he was a good farmer, and very indus-

acres of land, which the family still holds in Baltimore County. (The Editor well remembers Jacob Hall.)

trious in his work. He had a fine garden and well selected assortment of fruit trees. He kept two horses and several cows, and was very skilful in the management of his bees. All this work kept him closely engaged, except during the winter, leaving but scant time for his favorite studies, but from the fact that life was for him a school, and whether he was following the plough or reaping his grain, his contemplative mind found time for development.

### CHAPTER II.

IN order to picture to ourselves the difficult circumstances through which Banneker's genius struggled, we must recall the wildness of the country, and the merely dawning civilization of the period. Although there were, in this section of the country, many settlers, there were still vast tracts of primeval forest, where the native animals found ample range.

Here would be found deer, wild turkeys, and other timid creatures, while close at hand lurked their destroyers, the wolf, the panther, and the wild-cat, whose nightly cries disturbed the neighboring settlers. These animals had full possession of the valley where Ellicott City centres\* until the year 1772, at which period Banneker was forty-one years old.

<sup>\*</sup> The spot where the Patapsco flour-mill stands was the favorite resort of deer. It was the pleasing boast of a laborer, familiarly called Bill Johnson, who, in 1789, planted trees, still standing near the old residences, that he had killed many fine deer there.

When he was twenty-one years old there were only two sea-going vessels owned in Baltimore, and he was forty-two years old before any newspaper was published there. "The Maryland Gazette and Commercial Advertiser" issued its first number August 20, 1773. Previous to this, "Green's Maryland Gazette," first issued in 1745, at Annapolis, was the sole advertising medium of the Province.

The one or two public stores to be found at that time in Baltimore, Joppa, and Annapolis, were so far out of reach of the planters of Elk Ridge, that they were accustomed to make their own importations. The size and luxury of these luctuated with the London tobacco market. When this commodity commanded a good price, hey indulged in large importations, purchasing nuch more than they needed for their own use. Each of these importing planters had a storehouse, which received the varied result of the importation.

After selecting all that was required for home use, the surplus was disposed of to non-import-

ng planters and small farmers.

It was the custom on large plantations to fire cannon at sunrise, to summon all hands to the business of the day; but, when this cannon was

fired at sunset, it was a notification that a supply of goods had arrived, which would be offered for sale or barter on the next and following days.

It was on such stores as this that Banneker was compelled to depend during the earlier period of his life.

Every description of farming implement, from a plough to a rake, was purchased here; manufactures being discouraged by the home government. Even shoes were thus procured. Rich and poor all met here to purchase, many hurrying to get a first choice of the products of the looms of Great Britain and India. Here could be had brocades, embroideries, china, glassware and mirrors, engravings, choice editions of classical writers, wines, and groceries.

Goods were sold at these private stores that would make a modern country store proprieto stand aghast at the thought of purchasing Specimens of these early importations, still care fully preserved in some old families, do not suffer by comparison with the productions of modern times.

When Banneker, as well as his neighbors visited these private store-houses, designing to purchase any bulky commodities, they would be accompanied by one or more pack-horses, accord-

ing to the proposed extent of their purchases. There were no roads over which even a wagon could travel, except that from Frederick to Baltimore, with a branch road to Annapolis. Carriages were a thing unseen and almost unheard of. There was a net-work of "bridle-roads," as they were termed; mere winding paths, connecting different parts of the country together. From Frederick, such a road was used to communicate with Georgia.

"Rolling roads" were those over which tobacco was taken to its place of shipment. Their
name suggests the manner in which the tobacco
was propelled. After being packed in hogsleads and securely hooped, each hogshead was
consigned to the care of two men, who rolled it
over and over to the place of shipment. Elk
Ridge Landing, on the Patapsco River, near the
Washington Railroad, was the port most used by
residents of "Elk Ridge," as that large section
of country was called. Shipments to London,
and importations, were generally made through
the port of Joppa, the tobacco sent from Elk
Ridge Landing being reshipped at the latter
blace.

Joppa took precedence of Baltimore in commercial importance until the year 1773. It was

the seat of the courts of Baltimore County, in which at that time Harford County was included. At the above date the county was divided, and the northern part named after the proprietary of the time. This change was fatal to the town of Joppa. On this spot, where there was a court. house, four-story warehouses, and many dwellings built of imported brick, there now remains but one dwelling. This is the property of Mr. James Murray, a large landed proprietor. When the tide of prosperity receded, Joppa was stranded, and from that time the buildings served as a quarry or brick-yard, from which the neighboring farmers purchased material for building Bricks were bought there as late as 1849, when the supply came to an end.

The only local evidence that this town eve existed is found in the graveyard, where we may read on marble brought from London,—

IN MEMORY OF
DAVID MCCULLOH,
MERCHANT IN JOPPA,
WHO DIED THE 7TH DAY OF SEPT. 1766,
AGED 48 YEARS.

The former site of Joppa may be seen to the left, in travelling northward over the Gunpow-

der bridge, on the Philadelphia, Wilmington and Baltimore Railroad.

During this simple state of society, people learned much self-reliance. Until Banneker was forty-two years old, there were no workshops except of a private character, not even a blacksmith's shop. Each plantation and family had its own shop or shops. There, horses were shod with imported shoes and farming implements mended; all sorts of repairs were made in these shops. The blacksmith, the cobbler, the tinker, the tailor, were all travelling artisans. Plying their trade in a considerable area of country, they became necessarily depositories of local news, for which they were none the less welcome, as they made their various trips.

We shall see presently how desirable it would have been for the young Banneker to have had some delicate tools fashioned to assist him in an intricate piece of mechanism; and it is hard to realize how he was able to attain so high a degree of scientific culture and skilled manipulation, as he manifested at this time, when he was seemingly without opportunity for study or observation, and even without tools to aid him. His genius, however, developed in combating difficulties.

During his earlier manhood he found a great delight in mechanics, but had passed the meridian of life before astronomy became the one study to which all others yielded precedence.

When he had seen no timepieces but a sundial and a watch, he made himself a clock, which struck the hours, and was an admirable time-keeper. The works were of hard wood, cut out with a knife. In 1773, this clock had been running twenty years, and was naturally regarded as a great curiosity. When the clock was completed, Banneker was twenty-two years old. The fame of this achievement spread far and wide, and caused people to marvel much over this self-taught son of Africa, who was thus outstripping his neighbors of Anglo-Saxon parentage.

### CHAPTER III.

IN 1772, when Banneker was forty-one years old, a new field opened to his mental vision. It was the advent of the Ellicott family, who at this time moved from Pennsylvania and settled in Banneker's neighborhood. These were men of great force and foresight. Arriving by water at Elk Ridge Landing, they took their wagons apart, and carried them, a piece at a time, into the wilderness, where they proposed to erect flour-mills. Here they cleared away the forest and built dams, and began to build mills (with a view to exporting flour) in a country where no grain was raised except for family use.

Their neighbors were not slow to visit this scene of action, most of them protesting against the folly of the work, as there never was any grain for sale in the neighborhood, the main

product of the soil being tobacco.

These Ellicotts had examined the character of the country before deciding to settle there. They considered it peculiarly adapted to the

growth of cereals, and they told their neighbors that "a demand would create a supply," and that there would be wheat to grind as soon as there was a mill to grind it. Meantime, they had set an example of what could be done, by planting crops upon their own land at the same time that their building operations were going on.

By the time that their first mill was ready to run, there was no lack of grain being offered for sale, but the first flour was made from the growth of their own fields. In a few years, the agricultural system of the community was revolutionized, and the district became noted for its abundant crops of grain.

The fame of Banneker's clock had been the cause of an early acquaintance between him and his miller neighbors. They found him and his mother living together in great comfort and plenty. The boarding-houses for the workmen who erected the mills, and other buildings for Ellicott & Co., were largely supplied with provisions from the farm of Banneker. His mother, Mary Banneker, attended to the marketing, bringing for sale poultry, vegetables, fruit, and honey.

The mother of Banneker was (her oppor-

tunities considered) a woman of uncommon intelligence. She had a knowledge of the properties and uses of herbs, which was often of advantage to her neighbors. Her appearance was imposing, her complexion a pale copper color, similar to that of the fairest Indian tribes, and she had an ample growth of long black hair, which never became gray. Her grandsons, the children of one of her daughters, used to speak with admiration of her many good qualities and her remarkable activity. They loved to relate that when she wished to prepare a basket of chickens for market, "she would run them down and catch them without assistance." This continued her practice when she was over seventy years of age.

The erection of the milling machinery was ratched with great interest by Banneker, and e continued to make frequent visits to the nills after their operations had ceased to be a lovelty.

A store had naturally grown up beside the mills, in an apartment of which, very soon, a post-office was opened and a daily mail established. This store became a place of resort for the planters and others, to whom it served as an

exchange, where, after selling or buying and receiving their mail, they tarried to discuss the news of the day.

The conversational powers of Banneker being of the first order, he was encouraged by the proprietors to make them frequent visits, and he was thus introduced to many strangers.

When he could be induced to lay aside the modest reserve for which he was conspicuous, all were pleased to listen to him. His mind was filled with volumes of traditionary lore, from which he would relate various anecdotes of the first occupation of the country by the emigrants; their disappointments and difficulties, and final successes; when, ceasing their fruitless search for gold, they settled down to the cultivation of the soil.\*

Occasionally, Banneker would allude to his own life, and his laborious pursuit of knowledge, unaided by the auxiliaries he then enjoyed through the kindness of the owners of the mills.

<sup>\*</sup> The great amount of the precious metals found in Mexico and Peru had seemed to madden all Europe. In the settlement of Maryland, as elsewhere, it was believed gold would be found, of which the proprietary was to receive a certain share.

There was an especial sympathy between one of the younger members of the Ellicott family and Banneker. This was George Ellicott, the father of the author.

He had been a mere youth when the family settled at Ellicott's Mills. That he had much energy and business capacity, we may know from the fact that the present road from Frederick to Baltimore was surveyed and laid out by him when he was seventeen years old. It is three miles shorter than the previous road. George Ellicott had a great love for the science of astronomy, in which he was well versed. Conceiving early a high estimate of Banneker's powers, he found pleasure in making him frequent visits, and furnishing him with such books and instruments as would aid him in his studies.

### CHAPTER IV.

AS years moved on, such was the advancement which Banneker made in his astronomical studies, that George Ellicott urged him to undertake the calculation of almanaes.

Some time afterwards, during the spring of 1789, Banneker submitted to him his first projection of an eclipse. It contained a trifling error, which being frankly pointed out, he replied in the following letter, of which the original orthography is preserved:

Letter of Benjamin Banneker to George Ellicott.

SIR.—I received your letter at the hand of Bell but found nothing strange to me. In the Letter Concerning the number of Eclipses, tho' according to authors the Edge of the penumbra only touches the Suns Limb in that Eclips,\* that I left out of the number—which happens April 14th day, at 37 minutes past 7 o'clock in the morning, and is the first

<sup>\*</sup> It is thought proper to retain the original style of expression and the erroneous spelling as the unlettered author, Banneker, left them.

we shall have; but since you wrote to me, I drew in the Equations of the Node, which will cause a small Solar Defet, but as I did not intend to publish, I was not so very peticular, as I should have been, but was more intent upon the true method of projecting a Solar Eclips. It is an easy matter for us, when a Diagram is laid down before us, to draw one in resemblance of it, but it is a hard matter for young Tyroes in Astronomy, when only the elements for the projection is laid down before him, to draw his Diagram with any degree of certainty.

"Says the Learned Leadbetter, the projection I shall here describe is that mentioned by Mr. Flamstead. When the Sun is in Cancer, Leo, Virgo, Libra, Scorpio or Sagitary, the Axes of the Globe must lie to the right hand of the Axes of the Ecleptic, but when the Sun is in Capricorn, Aquarius, Pisces, Aries, Taurus, or Gemini, then to the left.

"Says the wise Author, Ferguson, when the Suns in Capercorn, Aquarius, Pisces, Aries, Taurus, and Gemeni the Northern half of the Earths Axes ies to the right hand of the Axes of the Ecleptic, and to the left hand whilst the Sun is on the other six signs."

Now, Mr. Ellicott, two such learned gentlemen as the above mentioned, one in direct opposition to the other, stagnates young beginners, but I hope the stagnation will not be of long duration,

for this I observe, that Leadbetter counts the time on the path of Vertex, 1, 2, 3, etc., from the right to the left hand, or from the consequent to the antecedent. But Fergusen on the path of Vertex, counts the time 1, 2, 3, etc., from the left to the right hand according to the order of numbers, so that, that is regular, shall compensate for irregularity. Now, Sir, if I can overcome this difficulty, I doubt not being able to calculate a common Almanac. Sir, no more,

But remain your faithful friend,
B. BANNEKER.

Mr. George Ellicott, Oct. 13th, 1789.

Banneker was now fifty-eight years of age. A letter to the author by her uncle, Thomas Ellicott, who frequently saw him during this period, describes him as "of black complexion, soft and gentle manners, though manly, and with uncommonly pleasing colloquial powers." His appearance gave no trace of his mixed blood. While his mother was of quite a light tint and had perfectly straight hair, her son showed only the negro descent. In his letter to Thomas Jefferson, it will be seen that he speaks of his color as of "the deepest dye." The testimony of all who knew him was to the same effect. Banneker inherited no trace of the Anglo-Saxon blood

of his grandmother, nor did he possess any of her mental characteristics, her powers of mind having been very limited. All who had known his grandfather, the African prince, conceded that it was from him that the student grandson inherited the fine qualities of mind through which the name of Banneker became famous. His superiority over other men of his race made him

object of interest with all who knew him. ey accepted his advancement in knowledge a harbinger of better days for his people. s cottage came to be much frequented by rangers, as well as by the neighboring gentry. was in this retired abode that the writer's other, Elizabeth Ellicott, made him a visit in impany with some of her friends in 1790. His por stood wide open, and so closely was his find engaged that they entered without being en. Immediately upon observing them he rose, and with much courtesy invited them to e seated. The large oval table at which Banneter sat was strewn with works on astronomy and with scientific appurtenances. He alluded to his love of the study of astronomy and mathematics as quite unsuited to a man of his class, and regretted his slow advancement in them, owing to the laborious nature of his agricultural engagements, which obliged him to spend the greater portion of his time in the fields.

Whilst they were engaged in conversation his clock struck the hour, and at their request he gave them an account of its construction With his inferior tools, with no other model than a borrowed watch, it had cost him long and patient labor to perfect it. It require much study to produce a concert of corn action between the hour, minute, and seed machinery, and to cause it to strike the hou He acknowledged himself amply repaid for his cares in its construction by the precision with which it marked the passing time. If mother had died previously to this, and he w the sole occupant of his dwelling. There h been a very strong affection between this moth and her gifted son.

Banneker was very assiduous in all his pursuits, and had much interest in agriculture, befinding his material occupations interfere a much with his design of devoting himself more closely to science, he sought out some plan by which he might obtain the coveted leisure, and hesitated long before deciding on an arrangement adapted to his condition. He finally de-

termined to convey his land to Ellicott & Co., reserving to himself a life-estate in it. By this plan he received an annuity of £12 a year. Estimating this yearly payment by the probable duration of his life, he remarked to his assignees, "I believe I shall live fifteen years, and consider my land worth £180, Maryland currency. By receiving £12 a year for fifteen years, I shall, in the contemplated time, receive its full value; if, on the contrary, I die before that day, you will be at liberty to take possession." On making this change in his affairs, he deemed some explanation necessary as an apology for his apparent selfishness.

le referred to his desire to increase his knowle on subjects to which his attention had been ected from his youth, and to his inability, from ysical infirmities, to perform much laborious ercise; his land would thus be poorly cultited, and poverty, an evil he much dreaded, crease upon him. Should he attempt to divide as small property, by will, among his nearest clatives, the parcels would be too small to be if service to any. If he gave it all to two or hree, they would become objects of envy. Unler the pressure of these conflicting views, he

avowed that he felt excusable for making an arrangement exclusively for his own benefit.

Being now relieved from the necessity for constant toil, he revelled as never before in his astronomical studies. Banneker never married, nor can we learn that his mind was ever turned to the thought of such a possibility as marriage. He was possessed of a rare self-reliance. His "unbounded\* desires to become acquainted with the secrets of nature" caused him to need little society. His sisters, Minta Black and Molly Morton, lived near him, and cared for his necessities.

Having ceased a life of labor, he mostly passed the night, wrapped in his cloak and lying parter on the ground, in contemplation of heavenly bodies.

At dawn he retired to rest, and spent a plof the day in repose, but does not seem to have required as much sleep as ordinary mortal Still cultivating sufficient ground to give him edful exercise, he might often be seen hoein his corn, cultivating his garden, or trimming his fruit trees. Sometimes he would be found watching the habits of his bees.

<sup>\*</sup> His letter to Thomas Jefferson.

Occasionally, as a relaxation from his favorite studies, he would pass the twilight hour seated beneath a large chestnut-tree, which grew on the hillside near his house, playing on the flute or violin. He loved music, and had some little skill in using either of these instruments.

## CHAPTER V.

BANNEKER assisted in the survey of the Federal Territory, as the District of Columbia was first called. This was the only occasion of his being more than a very short distance from his home.

After the adoption of the Constitution of the United States, the States of Maryland and Virginia ceded a portion of their territory to con stitute a seat for the metropolis of the count Commissioners were appointed to lay it and first gave the survey in charge of Ma Pierre L' Enfant, by whom, under the adv of Washington, the streets of our metropolis city were planned. The survey subsequent in the year 1790, devolved upon Major Andre Ellicott, of Ellicott's Upper Mills.

Major Ellicott selected Benjamin Banneke as his assistant upon this occasion, and it was with his aid that the lines of the Federal Ter ritory, as the District of Columbia was then

called, were run.

It was the work, also, of Major Ellicott, under the orders of General Washington, then President of the United States, to locate the sites of the Capitol, President's house, Treasury, and other public buildings. In this, also, Banneker was his assistant.

Banneker's deportment during this engagement was such as to secure for him the admition and respect of the Commissioners and leir staff. His striking superiority over all en of his race whom they had met, led them disregard all prejudice of caste, and converse ely with him, and enjoy the clearness and iginality of his remarks.

He was invited to sit at table with the engieer corps, but, as his characteristic modesty duced him to decline this, a separate table s prepared for him in their dining-room; his als being served at the same time with theirs. On his return home, he called at the house his friend George Ellicott to give an account his engagements. He arrived on horseback, ressed in his usual costume, a full suit of draboth, surmounted by a large beaver hat.

He was in fine spirits, seeming to have been canimated by the kindness of the distinguished ten with whom he had mingled.

With his usual humility he estimated his own services at a low rate

One matter, personal to himself, gave him great pleasure in the retrospect. He had not, during his absence, tasted either wine or spirit-

uous liquors.

He had experienced the fact that it was unwise for him to indulge, ever so slightly, in stimulating drinks. On this occasion he sai "I feared to trust myself even with wine, lest steal away the little sense I have." He was noble example of what may be accomplished by a firm resolve.

Before entering upon his engagements wit Major Ellicott, he had surmounted the difficu ties alluded to in his letter to George Ellicot of October, 1789. On returning from his jour ney, he completed his first almanac, and ranged for its publication in the year 1792.

Previously to the publication of this almand he sent a manuscript copy of it to Thomas Jo

ferson, then Secretary of State.

We subjoin the letter with which he accompa nied the almanac, in which he so feelingly allude to the degradation of his people. The package was forwarded to Philadelphia, which was at that time the seat of the General Government.

Maryland, Baltimore County, Near Ellicott's Lower Mills, August 19, 1791.

To Thomas Jefferson, Secretary of State, Philadelphia.

SIR.—I am fully sensible of the greatness of that freedom which I take on the present occasion; a liberty, which seemed to me scarcely allowable, when I reflected on that distinguished and honorable station in which you stand; and, the almost pheral prejudice and prepossession which is prevatut in the world, against those of my complexion.

I suppose it is a truth too well attested to you need a proof here, that we are a race of beings the have long labored under the abuse and censure the world, that we have long been considered ather brutish, than as human, and scarcely capable of mental endowments.

Sir, I hope I may safely admit, in consequence that report which hath reached me, that you re a man far less inflexible in sentiments of this ature, than many others; that you are measurally friendly, and ready to lend your aid and ssistance to our relief, from the many distresses and numerous calamities to which we are reduced. Now, Sir, if this is founded in truth, I apprehend you will embrace every opportunity to eradicate that train of absurd and false ideas and opinions, which so generally prevail with respect to us; and that your sentiments are concurrent with mine,

which are—that one Universal Father hath given being to us all, and that He hath not only made us all of one flesh, but that He hath also, without partiality, afforded us all the same sensations, and endued us all with the same faculties; and that, however variable we may be in Society and Religion, however diversified in situation and color, we are all of the same family, and stand in the same relation to Him.

Sir, if these are sentiments of which you a fully persuaded, I hope you cannot but acknowledge that it is the indispensable duty of those who maintain for themselves the rights of human nature, and who profess the obligations of Christianity, to extend their power and influence the relief of every part of the human race, from whatever burden or oppression they may unjustly labor under; and this, I apprehend, a full conviction of the truth, and obligations of these principles should lead all to.

Sir, I have long been convinced, that if you love for yourselves, and for those inestimable laws which preserve to you the rights of human nature was founded on sincerity, you could not but be solicitous that every individual, of whatever rank or distinction, might with you equally enjoy the blessings thereof; neither could you rest satisfied, short of the most active diffusion of your exertions, in order to their promotion from any state

of degradation to which the unjustifiable cruelty and barbarism of men may have reduced them.

Sir, I freely and cheerfully acknowledge that I am of the African race; and, in that color which is natural to them, of the deepest dye; and it is under a sense of the most profound gratitude to the Supreme Ruler of the Universe, that I now confess to you that I am not under that state of tyrannical thraldom and inhuman captivity to which too many of my brethren are doomed; but that I have abundantly tasted of the fruition of those blessings, which proceed from that free and unequalled liberty with which you are favored, and which I hope you will willingly allow you have received from the immediate Hand of that leing from whom proceedeth "every good and perfect gift."

Sir, suffer me to recall to your mind that time in which the arms and tyranny of the British Crown were exerted with every powerful effort, in order to reduce you to a state of servitude. Look back, I entreat you, to the variety of dangers to which you were exposed; reflect on that time in which every human aid appeared unavailable, and in which even hope and fortitude wore the aspect of inability to the conflict; and you cannot but be led to a serious and grateful sense of your miraculous and providential preservation.

You cannot but acknowledge that the present

freedom and tranquillity which you enjoy you have mercifully received, and that it is the peculiar blessing of Heaven.

This, Sir, was a time in which you clearly saw into the injustice of a state of slavery, and in which you had just apprehensions of the horrors of its condition; it was now, Sir, that your abhorrence thereof was so excited that you publicly held forth this true and invaluable doctrine, which is worthy to be recorded and remembered in all succeeding ages, "We hold these truths to be self-evident, that all men are created equal, and that they are endowed by their Creator with certain inalienable rights, that amongst these are life, liberty, and the pursuit of happiness."

Here, Sir, was a time in which your tender feelings for yourselves engaged you thus to declare you were then impressed with a proper idea of the just valuation of liberty, and the free possession of those blessings to which you were entitled by nature; but, Sir, how pitiable it is to reflect, that altho' you were so fully convinced of the benevolence of the Father of mankind, and of his equal and impartial distribution of those rights and privileges which He had conferred upon them, that you should, at the same time, counteract his mercies, in detaining, by fraud and violence, so numerous a part of my brethren, under groaning captivity and oppression; that you should, at the

same time, be found guilty of that most criminal act, which you professedly detested in others, with respect to yourselves.

Sir, I suppose that your knowledge of the situation of my brethren is too extensive to need a recital here; neither shall I presume to prescribe methods by which they may be relieved, otherwise than by recommending to you, and to all others, to wean yourselves from those narrow prejudices which you have imbibed with respect to them, and, as Job proposed to his friends, "Put your souls in their souls' stead." Thus shall your hearts be enlarged with kindness and benevolence towards them, and thus shall you need neither the direction of myself nor others in what manner to proceed therein.

And now, Sir, altho' my sympathy and affection for my brethren hath caused my enlargement thus far, I ardently hope that your candor and generiosity will plead with you in my behalf, when I make known to you that it was not originally my design, but that, having taken up my pen in order to direct to you, as a present, a copy of an Almanac which I have calculated for the ensuing year, I was unexpectedly and unavoidably led thereto.

This calculation, Sir, is the production of my arduous study, in this my advanced stage of life; for having long had unbounded desires to become acquainted with the secrets of nature, I have had

to gratify my curiosity herein, thro' my own assiduous application to astronomical study, in which I need not recount to you the many difficulties and disadvantages I have had to encounter.

And, altho' I had almost declined to make my calculation for the ensuing year, in consequence of the time which I had allotted therefor being taken up at the Federal Territory, by the request of Mr. Andrew Ellicott; yet, finding myself under several engagements to printers of this State, to whom I had communicated my design, on my return to my place of residence, I industriously applied myself thereto, which I hope I have accomplished with correctness and accuracy, a corry of which I have taken the liberty to direct to you. and which I humbly request you will favorably receive; and, altho' you may have the opportunity' of perusing it after its publication, yet I chose to send it to you in manuscript previous thereto, that thereby you might not only have an earlier inspection, but that you might also view it in my own handwriting.

And now, Sir, I shall conclude, and subscrib

myself with the most profound respect,

Your most obedient, humble servant,

B. BANNEKER.

Mr. THOMAS JEFFERSON, Secretary of State, Philadelphia.

N. B.—Any communication to me may be had

by a direction to Mr. Elias Ellicott, Baltimore Town.\*

Thomas Jefferson's reply to the above letter.

PHILADELPHIA, August 30, 1791.

SIR.—I thank you sincerely for your letter of the 19th instant, and for the almanac it contained. Nobody wishes more than I do, to see such proofs as you exhibit that nature has given to our black brethren talents equal to the other colors of men, and that the appearance of a want of them is owing merely to the degraded condition of their existence, both in Africa and America. I can add, with truth, that nobody wishes more ardently to see a good system commenced for raising the condition, both of their body and mind, to what it ought to be, as fast as the imbecility of their present existence, and other circumstances which cannot be neglected, will admit.

I have taken the liberty of sending your almanac to Monsieur de Condorcet, Secretary of the Academy of Sciences at Paris, and member of the Philanthropic Society, because I considered it as a cocument to which your whole color had a right, for their justification against the doubts which have been entertained of them.

<sup>\*</sup>Elias Eliicott was the member of the house of Ellicott Co. whose residence was fixed in Baltimore.

I am with great esteem, Sir, your most obedient, humble servant,

THOMAS JEFFERSON.

Mr. Benjamin Banneker,

Near Ellicott's Lower Mills, Baltimore Co.

We subjoin, without abridgment, the very comprehensive title-page of the Afric-American astronomer's first almanac:

## BENJAMIN BANNEKER'S

PENNSYLVANIA, DELAWARE, MARYLAND, AND VIRGINIA

ALMANAC

AND

EPHEMERIS

FOR THE YEAR OF OUR LORD,

1792.

Being Bissextile or Leap Year, and the sixteenth year of American Independence, which commenced July 4th, 1776. Containing the Motions of the Sun and Moon, the true places and aspects of the Planets, the Rising and Setting of the Sun, and the Rising, Setting, and Southing Place and Age of the Moon, etc., the Lunations, Conjunctions, Eclipses Judgments of the Weather, Festivals, and other remarkable days. Days for holding the Supreme and Circuit courts of the United States, as also the usual

courts in Pennsylvania, Delaware, Maryland, and Virginia; also several useful Tables and valuable Recipes; various selections from the common-place Book of the Kentucky Philosopher, an American sage; with interesting and entertaining Essays in Prose and Verse, the whole comprising a greater, more pleasing and useful variety than any work of the kind and price in North America.

We also give the printer's advertisement.

Baltimore; Printed and sold Wholesale and Retail by William Goddard and James Angell, at their Printing-office in Market Street; sold also by Mr. Joseph Cruikshank, Printer in Market Street, and Mr. Daniel Humphreys, Printer in South Front Street, Philadelphia, and by Messrs. Hanson and Bond, Printers, Alexandria, Va.

Annexed to the title-page was a card from William Goddard and James Angell, from which we extract the following:

"The editors of the Pennsylvania, Delaware, Maryland, and Virginia Almanac feel themselves gratified in the opportunity of presenting to the public, through the medium of their press, what must be considered an extraordinary effort of genius—a complete and accurate Ephemeris for the year 1792, calculated by a sable descendant of Africa,

who, by this specimen of ingenuity, evinces to demonstration that mental powers and endowments are not the exclusive excellence of white people; but that the rays of science may alike illumine the minds of men of every clime, however they may differ in the color of their skin, particularly those whom tyrant custom hath taught us to depreciate as a race inferior in intellectual capacity.

"They flatter themselves that a philanthropic public, in this enlightened era, will be induced to give their patronage and support to this work, not only on account of its intrinsic merit (it having met the approbation of several of the most distinguished astronomers in America, particularly the celebrated Mr. Rittenhouse), but from similar motive to those which induced the editors to give this calculat on the preference—the desire of drawing modest media from obscurity, and controverting the long established, illiberal prejudice against them.

"The editors of Banneker's Almanac have taken the liberty of annexing a letter from Mr. James Mc-Henry, containing particulars respecting Benjamin, which it is presumed will prove more acceptable to the reader than anything further in the prefatory way."

BALTIMORE, August 20, 1791

MESSRS. GODDARD AND ANGELL.

Benjamin Banneker, a free negro, has calculated an almanac for the ensuing year, 1792, which, being

desirous to dispose of to the best advantage, he has requested me to aid his application to you for that purpose. Having fully satisfied myself with respect to his title to this kind of authorship, if you can agree with him for the price of his work, I may venture to assure you, it will do you credit as editors, while it will afford you the opportunity to encourage talents that have thus far surmounted the most discouraging circumstances and prejudices.

This man is about fifty-eight years of age. Hewas born in Baltimore Co. . . . .

His father and mother were enabled to send him to an obscure school, where he learned, when a boy, reading, writing, and arithmetic as far as double fractions, and to leave him at their deaths a few acres of land, upon which he has supported himself ever since by means of economy and constant labor, and preserved a fair reputation.

To struggle incessantly against want is no way favorable to improvement. What he learned, however, he did not forget; for as some hours of leisure wild occur in the most toilsome life, he availed himself of them—not to read and acquire knowledge from writings of genius and discovery, for of such he had none, but to digest and apply, as occasion presented, the few principles of the few rules of a tithmetic which he had been taught at school.

This kind of mental exercise formed his chief musement, and soon gave him a facility in calcu-

lation that was often serviceable to his neighbors, and at length attracted the attention of the Messrs. Ellicott, a family remarkable for their ingenuity and turn for the useful mechanics.

It is about three years since Mr. George Ellicott lent him "Mayer's Tables," "Ferguson's Astronomy," "Leadbeater's Lunar Tables," and some astronomic instruments.

These books and instruments, the first of the kind he had ever seen, opened a new world to Benjamin, and from thenceforward he employed his leisure in astronomical researches. He now took up the idea of the calculations for an almanac, and actually completed an entire set for the last year, upon his original stock of arithmetic.

Encouraged by his first attempt, he entered upon his calculation for 1792, which he began and finished without the least information or assistance from any person or other books than those I have mentioned, so that whatever merit is attached to his present performance, it is peculiarly and exclusively his own.

I have been the more careful to investigate those particulars and to ascertain their reality, as they form an interesting fact in the history of man; and, as you may want them to gratify curiosity, I have no objection to your selecting them for your account of Benjamin.

L I consider this negro as a fresh proof that the

powers of the mind are disconnected with the color of the skin, or, in other words, a striking contradiction to Mr. Hume's doctrine, that "the negroes are naturally inferior to the whites, and unsusceptible of attainments in arts and sciences." In every civilized country, we shall find thousands of whites liberally educated, and who have enjoyed greater opportunities for instruction than this negro, his inferiors in those intellectual acquirements and capacities that form the most characteristic features in the human race.

But the system that would assign to these degraded blacks an origin different from the whites, if it is not ready to be deserted by philosophers, must be relinquished as similar instances multiply; and that such must frequently happen, cannot well be doubted, should no check impede the progress of humanity, which, meliorating the conditions of slavery, necessarily leads to its final extinction. Let, however, the issue be what it will, I cannot but wish on this occasion to see the public patronage keep pace with my black friend's merit.

I am, gentlemen, your most obedient servant,

JAMES McHENRY.

James McHenry was one of the most prominent men of Baltimore, and was several times honored by his fellow-citizens with positions of trust and dignity. He was elected a Senator of Maryland in 1781, but resigned his seat in 1786. He was also one of the commissioners for framing the Constitution of the United States, and with his colleagues signed that instrument in 1787.

On the election of John Adams to the Presidency of the United States, in 1797, James McHenry, as Secretary of War, became a member of his cabinet.

## CHAPTER VI.

Banneker was an adept in the solution of difficult mathematical problems. They were in his day, much more than at present, the pastime of persons of culture.

Such questions were frequently sent to him by scholars in different parts of the country, who wished to test his capacity. He never failed to return a solution, sometimes accompanying it by questions in rhyme of his own composition.

Charles W. Dorsey, a planter of Elk Ridge, at one time a clerk in the store of Ellicott & Co., very kindly furnished the author, in November, 1852, with the following recollections of Banneker, and also with one of those rhymed questions to which we have alluded:

"In the year 1800 I commenced my engageents in the store at Ellicott's Mills, where my stacquaintance with Benjamin Banneker began. e often came to the store to purchase articles his own use, and, after hearing him converse, was always anxious to wait upon him. After making his purchases, he usually went to the part of the store where George Ellicott was in the habit of sitting, to converse with him about the affairs of our government, and other matters. He was very precise in conversation and exhibited deep reflection. His deportment, whenever I saw him, was perfectly upright and correct, and he seemed to be acquainted with everything of importance that was passing in the country.

"I recollect to have seen his almanaes in my father's house, and believe they were the only ones used in the neighborhood at the time. He was a large man and inclined to be fleshy. He was far advanced in years when I first saw him.

"I remember being once at his house, but do not recollect anything of the comforts of the establishment, nor of the old clock, about which you queried.

"He was fond of, and well qualified to work out, abstruse questions in arithmetic. I remember he brought to the store one which he had composed himself and presented to George Ellicott for solution. I had a copy, which I has since lost, but the character and deportment the man were so wholly different from anythi I had ever seen in one of his color; his questionade so deep an impression on my mind that

have ever since retained a perfect recollection of it, except two lines, which do not alter the sense.

"I remember George Ellicott was engaged in making out the answer, and cannot now say how he succeeded, but have no doubt he did. I have thus briefly given you my recollections of Benjamin Banneker. I was young when he died, and doubtless many incidents, from the time which has since clapsed, have passed from my recollection."\*

The following is the question:

A cooper and vintner sat down for a talk. Both being so groggy that neither could walk; Says cooper to vintner, "I'm the first of my trade, There's no kind of vessel but what I have made. And of any shape, sir, just what you will, And of any size, sir, from a tun to a gill." "Then," says the vintner, "you're the man for me. Make me a vessel, if we can agree. The top and the bottom diameter define, To bear that proportion as fifteen to nine, Thirty-five inches are just what I crave, No more and no less in the depth will I have; Just thirty-nine gallons this vessel must hold, Then I will reward you with silver or gold,-Give me your promise, my honest old friend." "I'll make it to-morrow, that you may depend!"

<sup>\*</sup> C. W. Dorsey died in 1862.

So, the next day, the cooper, his work to discharge, Soon made the new vessel, but made it too large; He took out some staves, which made it too small, And then cursed the vessel, the vintner, and all. He beat on his breast, "By the powers" he swore He never would work at his trade any more. Now, my worthy friend, find out if you can, The vessel's dimensions, and comfort the man!

BENJAMIN BANNEKER.

Banneker continued the publication of almanacs for ten years, after which declining health caused him to discontinue his calculations.

His time, during this later period of his life, was much taken up with the visitors whom his fame had attracted to his simple home.

Of all who visited him, we find in only one published work any account of an interview with this extraordinary man.

We extract from this work, long since out of print, Memoir of Susannah Mason, by her daughter, R. Mason.

"We found the venerable star-gazer under a wide-spreading pear-tree laden with delicious fruit. He came forward to meet us, and bade us welcome to his lowly dwelling. It was built of logs, one story in height, and was surround by an orchard. In one corner of the room was clock of his own construction, which was

true herald of departing hours. He took down from a shelf a little book, wherein he registered the names of those by whose visits he felt particularly honored, and recorded my mother's name upon the list. He then diffidently, but very respectfully, requested her acceptance of one of his almanacs in manuscript."

In the course of a few days this lady sent Banneker a rhymed letter, which afterwards circulated through the newspapers of the day. We copy it from the same work from whence the preceding was taken.

"An address to Benjamin Banneker, the African astronomer, who presented the author with a manuscript almanac in 1796.

Some men, who private walks pursue, Whom fame ne'er ushered into view.

<sup>&</sup>quot;Transmitted on the wings of fame,
Thine eclat sounding with thy name,
Well pleased I heard, ere 't was my lot,
To see thee in thy humble cot,
That Genius smiled upon thy birth,
And application called it forth;
That times and tides thou couldst presage,
And traverse the celestial stage,
Where shining orbs their circles run
In swift rotation round the sun.

\* \* \* \* \* \* \* \* \*

May run their race, and few observe
To right or left, if they should swerve;
Their blemishes would not appear
Beyond their lines a single year.
But thou, a man exalted high,
Conspicuous in the world's keen eye,
On record now thy name's enrolled;
And future ages will be told
There lived a man named Banneker,
An African Astronomer!
Thou need'st to have a special care,
Thy conduct with thy talent square,
That no contaminating vice
Obscure thy lustre in our eyes."

Some time after receiving this communication, he sent to its author the following letter, which we copy literally:

August 26, 1797.

DEAR FEMALE FRIEND.—I have thought of you every day since I saw you last, and of my promise in respect of composing some verses for your amusement, but I am very much indisposed, and have been, ever since that time. I have a constant pain in my head, a palpitation in my flesh, and, I may say, I am attended with a complication of disorders, at this present writing, so that I cannot with an pleasure or delight gratify your curiosity in particular at this present time, yet I may say, will is good to oblige you, if I had it in my power

because you gave me good advice, and edifying language, in that piece of poetry which you was pleased to present unto me; and I can but love and thank you for the same; and, if it should ever be in my power to be serviceable to you in any measure, your reasonable request shall be armed with the obedience of

Your sincere friend and well wisher,
BENJAMIN BANNEKER.

Mrs. Susannah Mason.

N. B.—The above is mean writing done with trembling hands.

This letter was directed to the care of Cassandra Ellicott, afterwards married to Joseph Thornburg, of the mercantile house of Thornburg, Miller & Webster, Baltimore.

We give some of the old astronomer's notes, which are found in close proximity to his calculations of eclipses and other scientific work. We learn from some of these observations how fully he was alive to all that was beautiful or remarkable about him.

"Our distilled spirits are like unto the water of the river of Phrygia, which, if drank sparely, purges the brains and cures madness, but herwise it infects the brains and creates madess." "2 Kings, chapter 23d, verse 11, 'And he took away the horses that the kings of Judah had given to the sun.'"

"August 27th, 1797. Standing by my door, I heard the discharge of a gun, and in four or five seconds of time the small shot came rattling about me, one or two of which struck the house, which plainly demonstrates that the velocity of sound is much greater than that of a cannon-bullet. B. Banneker."

"22d of Dec., 1790. About 3 o'clock A. M., I heard a sound, and felt the shock, like unto heavy thunder. I went out, but could not observe any cloud above the horizon. I therefore concluded it must be a great earthquake in some quarter of the globe."

"1803, Feb. 3d. In the morning part of the day there arose a very dark cloud, followed by snow and hail, a flash of lightning and a loud thunder-crash, and then the storm abated until afternoon, when another cloud arose at the same point, viz., the northwest, with a beautiful shower of snow. But what beautified the snow was the brightness of the sun, which was near setting a the time."

He wrote the following account of the loculy years of his time in 1800:

"The first great locust year that I remember was in 1749. I was then about seventeen years old, when thousands of them came and were creeping about the bushes. I then imagined they came to eat and destroy the fruit of the earth, and would occasion a famine in the land. I therefore began to kill and destroy them, but soon saw that the labor was in vain, and therefore gave over my pretension. Again, in the year 1766, which is seventeen years after their first appearance to me, they made a second, and appeared to me as numerous as the first. I then being about thirty-four years of age had more sense than to endeavor to destroy them, knowing they were not so pernicious to the fruits of the earth as I did imagine they would he

"Again in the year 1783, which was seventeen years from their second appearance to me, they made their third, and may be expected again in 1800, which is seventeen years since their third appearance to me. So that I may venture to express it, their periodical return is seventeen years; but they, like the comets, make a short stay with us.

"I like to forget to inform, that if their lives are short, they are merry. They begin to sing

or make a noise from the first they come out of the earth till they die."

On the subject of his bees, he writes as follows:

"In the month of January, 1797, on a pleasant day for the season, I observed my honey bees, and they seemed to be very busy, all but one hive. Upon examination, I found all the bees had evacuated this hive, and left not a drop of honey behind them. On the 9th of February ensuing, I killed the neighboring hive of bees on a special occasion, and found a great quantity of honey, considering the season, which, I imagine, the stronger had violently taken from the weaker, and the weaker had pursued them to their home, resolved to be benefited by their labor or die in the contest."

The common-place book of the old astronomer gives ample assurance that his love for science had not diminished his prudent regard for the common affairs of life.

We give some of his memoranda:

"Sold on the 2d of April, 1795, to Butler, Edwards, and Kiddy, the right of an Almanae for the year 1796, for the sum of eighty dollars, equal to £30."

"On the 30th of April, 1795, lent John Ford five dollars—£1 17s. 6d."

"12th of December, 1797, bought a pound of candles, at 1s. 8d."

"Sold to John Collins two quarts dried peaches, 6d., one quart mead, 4d."

"On the 26th of March came Joshua Sanks with three or four bushels of turnips to feed the cows."

"13th of April, 1803, planted peas and sowed cabbage seed."

These domestic mementos occupy a strange proximity with entries of a more dignified nature, being occasionally found on the same page with a notice of astronomical character.

Benjamin Banneker possessed a remarkably mild and philosophic temperament, which was often manifested by his forbearance to his ignorant neighbors, who trespassed on his private rights, and to the boys of his vicinity who were in the constant habit of robbing his orchard. All his fruit was of the best kind, and his cherries and pears were in high favor with the youthful population, which had grown to be quite a formidable body in the last years of his life.

They would call respectfully at his door, ask and obtain permission to partake of some of his fruit, and afterwards retire; then, when he was shut up in his house immersed in calculations, they would return and strip his trees; thus he was often deprived of his fruit, and sometimes even before it had reached maturity.

For this he has been heard to remonstrate with the young culprits, and offer them an allowance of one-half, if they would leave him in undisturbed possession of the other half; but all to no purpose.

To a friend who once visited him in summer, he expressed his regret that he had no fruit to present him worthy of acceptance, adding, "I have no influence with the rising generation; all my arguments have failed to induce them to set bounds to their wants." He was not, however, left without a hope from the powerful influence of good examples sometimes at hand.

On this subject he remarked at the same time, "It has been said, 'Evil communications corrupt good manners;' I hope to live to hear that 'Good communications correct bad manners,'" a sentiment we find noted down amongst his manuscripts.

The situation of the astronomer's dwelling was one which would be admired by every lover of nature. Aside from furnishing a fine field for the observation of celestial phenomena, it commanded a prospect of the near and distant

hills of the Patapsco River, which have always been celebrated for their picturesque beauty. A never-failing spring gushed forth beneath a large golden willow-tree in the midst of his orchard.

The health of Banneker, as he approached the evening of his days, often suffered from complaints produced by his long and patient astronomical observations, continued throughout all seasons of the year.

His last recorded observations were for the month of January, 1804, and are contained in his common-place book. After that period his writing appears but once, when we find the name "Benjamin Banneker," with the date "1805," written by a trembling hand, on a torn and stitched leaf of his volume of manuscript almanacs. This is his last known penmanship.

6 \*

## CHAPTER VII.

HOWEVER unfavorable the circumstances over which Banneker's genius triumphed, he was not without advantages. He was born free, the son of a free man. His father, and his grandfather before him, had experienced for only a very short period the mental influences of a state of dependence. Banneker understood and respected his privileges, not the least among which was the elective franchise. In his letter to Thomas Jefferson, he says, "I have abundantly tasted of the fruition of those blessings which proceed from that free and unequalled liberty with which you are favored." All free men stood upon equal footing as voters, in Maryland, during the greater part of Banneker's life. There was a property qualification requisite, which, with age and residence, gave the right of voting until 1802. Then the law was changed, and the elective franchise conferred solely upon white men, twenty-one years old, who should have resided a given time in the place of voting. By this change the venerable astronomer was deprived of the valued privilege of voting during the last four years of his life.

We have said that Benjamin Banneker never married, neither did he unite himself with any religious sect. His life was one of constant worship in the great temples of nature and science. In his early days, places of worship were rare. As they increased in number during his later years, he would occasionally visit those of the various denominations. He finally gave a decided preference for the doctrines and form of worship of the Society of Friends, whose meeting-house at Ellicott's Mills he frequently attended.

The author well remembers Banneker's appearance on these occasions, when he always sat on the form nearest the door. He presented a most dignified aspect as he leaned in quiet contemplation on a long staff, which he always carried after passing his seventieth year. "And he worshipped leaning on the top of his staff." His reverent deportment on these occasions added to the natural majesty of his appearance.

The countenance of Banneker had a most benign and thoughtful expression. A fine head

of white hair surmounted his unusually broad and ample forehead, whilst the lower part of his face was slender and sloping towards the chin. His figure was perfectly erect, showing no inclination to stoop as he advanced in years. His raiment was always scrupulously neat; that for summer wear, being of unbleached linen, was beautifully washed and ironed by his sisters, Minta Black and Molly Morton, who, we have seen, lived near him, and looked after his domestic affairs. In cold weather he dressed in light colored cloth, a fine drab broadcloth constituting his attire when he designed appearing in his best style.

Being cut off from his favorite employments by reason of his infirmities, and his love of nature remaining ever with him, it so happened that when the great messenger, Death, called for him he was found out upon his favorite hills.

It was on the peaceful Sabbath morning of the 9th of October, 1806, that he strolled forth, as was his custom, to enjoy the air and the sunshine and the view. It was his last look on them with earthly vision. He met an acquaintance, with whom he conversed pleasantly for awhile, when, suddenly complaining of feeling sick, they immediately turned to his cottage.

He laid himself upon his couch and never spoke again. In a little while his mortal frame lay dead.

The following notice of his death is taken from the Federal Gazette and Baltimore Daily Advertiser, Tuesday morning, October 28, 1806:

"On Sunday, the 9th instant, departed this life, at his residence in Baltimore County, Mr. Benjamin Banneker, a black man, and immediate descendant of an African father. He was well known in his neighborhood for his quiet and peaceful demeanor, and, among scientific men, as an astronomer and mathematician.

"In early life he was instructed in the most common rules of arithmetic, and thereafter, with the assistance of different authors, he was enabled to acquire a perfect knowledge of all the higher branches of learning. Mr. Banneker was the calculator of several almanacs, published in this as well as several of the neighboring States; and, although of late years none of his almanacs have been published, yet he never failed to calculate one every year, and left them among his papers.\*

<sup>\*</sup> An error. Benjamin Banneker only ceased the publication of almanacs because his health was too feeble to admit of the labor of calculating them.—Ed.

"Preferring solitude to mixing with society, he devoted the greater part of his time to reading and contemplation, and to no book was he more attached than the Scriptures.

"At his death, he bequeathed all his astronomical and philosophical books and papers to a friend.

"Mr. Banneker is a prominent instance to prove that a descendant of Africa is susceptible of as great mental improvement and deep knowledge of the mysteries of nature as that of any other nation."

Some years prior to Banneker's death, he had been extremely ill, and, apprehending that he would not recover, he gave particular directions respecting the disposition of his personal property, but made no written bequests. He ordered that all the articles which had been presented to him by George Ellicott should be returned to him as soon as he should be no more.

It was owing to the singular promptness in carrying out these directions that any souvenirs of this extraordinary man were preserved. On the same day on which he died, one of his nephews carried out his wishes to the letter. Being himself the messenger who conveyed to

Ellicott's Mills the tidings of his uncle's death, he arrived at the house of George Ellicott driving a cart, in which was the oval table,\* on which all Banneker's calculations were made; a large number of scientific instruments, and many books on varied topics. These were accompanied by a legacy, which Banneker requested his friend to accept in memory of his long-continued kindness to the giver. It was a large volume of his manuscript and his common-place book. The former volume contains Banneker's observations on various subjects and copies of all his almanacs, as well as copies of his letter to Thomas Jefferson, and the reply of that statesman. We have extracted freely from these books in the preceding pages.

<sup>\*</sup>This table, and two of the books, which were returned with it, are the property of the editor.

One of these works is upon surveying, and gives evidence of much careful use. The other is a large volume entitled "Tabulæ Solis et Lunæ," by Tobias Mayer, the same for which the British Government paid Prof. Mayer's widow £ 3000, the author unhappily not having lived to reap the benefit of his labors.

This book has evidently been of great value to our student. The paper in some places is quite worn away. As much of the text is Latin, it appears that Banneker must have had some knowledge of that language.

Banneker left to his surviving sisters, Minta Black and Molly Morton, everything else that he died possessed of. The Bible in which he read seems to have been removed from the house with the same promptness as the legacy to George Ellicott, as it is still extant. His remains were interred two days subsequent to his decease, and whilst the last rites were being performed at his grave, his house took fire, and burned so rapidly that nothing was saved. His clock and all other evidences of his ingenuity and scholarship were consumed in the flames. Some months previous to his death he had given to one of his sisters a feather bed. All his other gifts to her sister and herself, except the Bible, having been destroyed, this bed was highly valued and carefully preserved. After the lapse of some years, she felt something hard among the feathers, which proved to be a purse of money. This simple fact is a pleasing evidence that, though the venerable sage was, through failing health, long hindered from lucrative employment, yet no shadow of poverty rested upon the evening of his honored life.